DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed have been fully considered but they are not persuasive. After the review of the Appeal brief it was found the prior did not cover each and every limitation of each and every claim. Arguing a specific reason for the issuing of a new office action is incorrect and a broad assumption. The previous action included the Rune reference for the reason of Hogan not teaching the information being transferred independently of message linked to calls or the user equipment. Hogan teaches the information being transferred from the core network to the radio access network. The core network 16 including MSC nodes and GPRS nodes and the radio access network including the RNCs 26 which communicate further to the base stations. The message being sent from the MSC to the RNC, i.e. from the core network to the radio access network. (Para 10-13) The combination of Rune is to show the obviousness of information begin transferred independently of messages linked to calls or equipment. It is obvious that a core network and a radio access network can communicate information back and forth without the need of having to also transfer information about a user or a call regarding a user. User independent messaging occurs and Rune is used to show that information can be transferred in a network without the need of attachment to a user. The combination therefore teaches transferring the information from a core network to a radio access network and that the information can obviously being transferred without having a need to be linked to a user or a call regarding a user as outlined in the rejection set below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan et al. (U.S. Pub. No. 2002/0111180) in view of Rune et al. (U.S. Pat. No. 7,031,707)

In regard to Claim 1, Hogan teaches a method for controlling access rights in a cellular mobile radio system, comprising transferring roaming agreement information from a core network to a radio access network of said cellular mobile radio system, (*the core network and the radio access network communicate via the Iu interface in the control plane, (Para 12-13)*)

Hogan does not specifically teach the roaming information being transferred independently of messages linked to calls or the user equipment.

Rune teaches a GLR which holds subscriber information regarding roaming information. Information is sent from an HLR to the GLR. The HLR will only need to transfer the profile to the GLR. The GLR is responsible for transferring the profile to the proper MSC/VLR within a VPLMN as the subscriber moves around. The MAP protocol used by GSM/UMTS systems for transferring data should be completely independent of

the presence of a GLR. When a subscriber roams around the HLR is not notified since the GLR contains the information already for the different zones the mobile is roaming. Therefore, the information is being transferred independent of messages that is linked to a user call or user equipments as the information is transferred to the GLR for dissemination through the network. (Col 2, Ln 20-41, Col 6, Ln 34-56)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hogan to include the teaching of the Rune in order to reduce signaling between visitor location registers and home location registers.

In regard to Claim 2, Hogan teaches wherein the roaming agreement transferred is common to a public land mobile network (PLMN) identified by a subset of an international mobile subscriber identity (IMSI) number. *(The operators and subscriber groups can be defined or expressed as one or more IMSI-PLMNs in which only a portion of the IMSI is used to define the groups based upon the PLMN (Para 15-19))*

In regard to Claim 3, Hogan teaches where said subset includes a mobile country code (MCC) and a mobile network code (MNC) field. (*The home-public land mobile network HPLMN id can be extracted from the IMSI. In this regard the HPLMN id is the mobile country code, MCC, and the mobile network code, MNC. (Para 19))*

In regard to Claims 4 and 5, Hogan teaches wherein according to said roaming agreement information access to a visited public land mobile network is authorized for the whole VPLMN or limited to certain areas of said VPLMN, wherein said certain area of said VPLMN are areas in which a HPLMN does not provide radio coverage. (*the network can be shared network wherein more than one operator controls the RNCs*

26(1 and 2) wherein the RNCs of the other operators may be used in conjunction with their own cells to provide service (Para 54))

In regard to claim 6, Hogan teaches wherein the roaming agreement information transferred is indicated for each location area (LA). *The operators and subscriber groups can be defined or expressed as one or more IMSI-PLMNs in which only a portion of the IMSI is used to define the groups based upon the PLMN (Para 15-19))*

In regard to Claim 7, Hogan teaches wherein said roaming agreement information is transferred in the event of modification of said information in the core network. (*the access group classification message can, as appropriate, be one of a location update response and a location update reject message, either of which can include the access group classification. (Para 24))*

In regard to Claims 8 and 9, Hogan teaches where the core network is configured beforehand with said roaming agreement information. (*the subscriber groups and restriction groups along with their compositions are typically pre-agreed among operators. (Para 15-17))*

In regard to Claim 10, Hogan teaches wherein said roaming agreement information is stored in the core network in a database of a visitor location register type. (*The subscriber information and groups are held in a location register. (Para 9))*

In regard to Claim 11, Hogan teaches a radio access network equipment of a cellular mobile radio communication system, the radio access network equipment comprising means for receiving roaming agreement information from a core network

equipment, (*the core network and the radio access network communicate via the Iu interface in the control plane, (Para 12-13)*)

Hogan does not specifically teach the roaming information being transferred independently of messages linked to calls or the user equipment.

Rune teaches a GLR which holds subscriber information regarding roaming information. Information is sent from an HLR to the GLR. The HLR will only need to transfer the profile to the GLR. The GLR is responsible for transferring the profile to the proper MSC/VLR within a VPLMN as the subscriber moves around. The MAP protocol used by GSM/UMTS systems for transferring data should be completely independent of the presence of a GLR. When a subscriber roams around the HLR is not notified since the GLR contains the information already for the different zones the mobile is roaming. Therefore, the information is being transferred independent of messages that is linked to a user call or user equipments as the information is transferred to the GLR for dissemination through the network. (Col 2, Ln 20-41, Col 6, Ln 34-56)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hogan to include the teaching of the Rune in order to reduce signaling between visitor location registers and home location registers.

In regard to Claim 12, Hogan teaches the radio access network equipment is a radio network controller (RNC) *(Para12)*

In regard to Claim 13, Hogan teaches a core network equipment of a cellular mobile radio system the core network comprising means for transferring roaming

agreement information to a radio access network equipment, (*the core network and the radio access network communicate via the Iu interface in the control plane, (Para 12-13)*)

Hogan does not specifically teach the roaming information being transferred independently of messages linked to calls or the user equipment.

Rune teaches a GLR which holds subscriber information regarding roaming information. Information is sent from an HLR to the GLR. The HLR will only need to transfer the profile to the GLR. The GLR is responsible for transferring the profile to the proper MSC/VLR within a VPLMN as the subscriber moves around. The MAP protocol used by GSM/UMTS systems for transferring data should be completely independent of the presence of a GLR. When a subscriber roams around the HLR is not notified since the GLR contains the information already for the different zones the mobile is roaming. Therefore, the information is being transferred independent of messages that is linked to a user call or user equipments as the information is transferred to the GLR for dissemination through the network. (Col 2, Ln 20-41, Col 6, Ln 34-56)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hogan to include the teaching of the Rune in order to reduce signaling between visitor location registers and home location registers.

In regard to Claim 14, Hogan teaches wherein said roaming agreement information is stored in a visitor location register (*Para 9)*, and said core network

equipment takes a form of a mobile switching center (MSC) type equipment connected to a VLR. *(Para 52)*

In regard to Claim 15, Hogan teaches where said roaming agreement information is stored in a VLR and said core network equipment takes the form of a GPRS support node type equipment. *(Para 52)*

In regard to Claim 16, Hogan teaches a mobile radio system comprising a plurality of terminals, (*subscriber lists and multiple lists provided from service providers of list of mobile subscribers in the system. (Para 15-19))* a core network which contains roaming agreement information (*the information is pre-agreed upon and distributed throughout the network. (Para 15-19))* a radio access network which communicates with the mobile terminals and the core network and manages mobility of mobile terminals within the radio access network *(Para 12, 52)*

Hogan does not specifically teach the roaming information being transferred independently of messages linked to calls or the user equipment.

Rune teaches a GLR which holds subscriber information regarding roaming information. Information is sent from an HLR to the GLR. The HLR will only need to transfer the profile to the GLR. The GLR is responsible for transferring the profile to the proper MSC/VLR within a VPLMN as the subscriber moves around. The MAP protocol used by GSM/UMTS systems for transferring data should be completely independent of the presence of a GLR. When a subscriber roams around the HLR is not notified since the GLR contains the information already for the different zones the mobile is roaming.

Therefore, the information is being transferred independent of messages that is linked to a user call or user equipments as the information is transferred to the GLR for dissemination through the network. (Col 2, Ln 20-41, Col 6, Ln 34-56)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hogan to include the teaching of the Rune in order to reduce signaling between visitor location registers and home location registers.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC ELCENKO whose telephone number is (571)272-8066. The examiner can normally be reached on M-F 7:30 AM through 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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